Contents

A Bonded Experience: “Value Creation as the Creation of an Experience, Within a Business Relationship” .......................... 1
Ron J. A. Journée and Marcel E. A. Weber

A Case Investigation of Product Structure Complexity in Mass Customization Using a Data Mining Approach .......................... 17
Peter Nielsen, Thomas D. Brunoe and Kjeld Nielsen

A Method for Specification of Multi-variant Products Using Degrees of Freedom of Shape Attributes in Product Structures ........ 27
Paul Christoph Gembarski and Roland Lachmayer

A Profile Chart Approach for Defining the Solution Space of a Production Network .......................................................... 39
Lars Skjelstad and Maria Kollberg Thomassen

Applying the 5 WHYs to Identify Root Causes to Non-completions in On-Site Construction .................................................. 51
Søren Lindhard

Challenges in Request Management: Demand Management of Customer-Driven Product Development .................................. 63
Anita Friis Sommer

Customization Issues: A Four-Level Customization Model ................................................................. 73
Kaj A. Joergensen, Thomas D. Brunoe, Stig Taps and Kjeld Nielsen

Danish Public Construction Counselling Selection and Assignment Criteria in European Tendering ........................................ 83
Jesper Kranker Larsen, Lene Faber Ussing and Thomas D. Brunoe

Delays in the Apparel Manufacturing Industry’s Implementation of Mass Customization .................................................. 93
Jocelyn Bellemare, Serge Carrier and Pierre Baptiste
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Describing Product Variety Using Set Theory</strong></td>
<td>105</td>
</tr>
<tr>
<td>Thomas D. Brunoe, Kjeld Nielsen, Kaj A. Joergensen and Stig B. Taps</td>
<td></td>
</tr>
<tr>
<td><strong>Design and Evaluation of a Reconfigurable Manufacturing System</strong></td>
<td>115</td>
</tr>
<tr>
<td>Shuai Zhang, Yang Li, Arne Bilberg and Ronen Hadar</td>
<td></td>
</tr>
<tr>
<td><strong>Design Configurator Requirements for IS Integration</strong></td>
<td>129</td>
</tr>
<tr>
<td>Pasi Paunu and Marko Mäkipää</td>
<td></td>
</tr>
<tr>
<td><strong>Designfunding: An Inquiry Tool for Mass Customization</strong></td>
<td>139</td>
</tr>
<tr>
<td>Matthias Kulcke</td>
<td></td>
</tr>
<tr>
<td><strong>Does Customer Co-creation Really Pay Off? An Investigation into the</strong></td>
<td>145</td>
</tr>
<tr>
<td><strong>Firm’s Benefits from Customer Involvement in New Product and Service</strong></td>
<td></td>
</tr>
<tr>
<td>Development**</td>
<td></td>
</tr>
<tr>
<td>Marcel E. A. Weber and Dirk H. Van der Laan</td>
<td></td>
</tr>
<tr>
<td><strong>Enablers of Innovation in the Construction Material Industry</strong></td>
<td>159</td>
</tr>
<tr>
<td>Søren Wandahl, Astrid Heidemann Lassen, Alexia Jacobsen and Søren Bolvig Poulsen</td>
<td></td>
</tr>
<tr>
<td><strong>Enabling Facilitation of Mass Customization via Partnering in the Construction Industry</strong></td>
<td>179</td>
</tr>
<tr>
<td>Kristian Ditlev Bohnstedt</td>
<td></td>
</tr>
<tr>
<td><strong>Extending Configuration and Validation of Customized Products by Implicit Features in Virtual Reality Environments</strong></td>
<td>189</td>
</tr>
<tr>
<td>Angel Bachvarov, Stoyan Maleshkov and Dimo Chotrov</td>
<td></td>
</tr>
<tr>
<td><strong>Extending the Theoretical Framework of Mass Customization:</strong></td>
<td>201</td>
</tr>
<tr>
<td><strong>Initial and Adaptive Solution Space Development for High-Variety Production Environments</strong></td>
<td></td>
</tr>
<tr>
<td>Frank Steiner</td>
<td></td>
</tr>
<tr>
<td><strong>Flexible Laser Metal Cutting: An Introduction to the ROBOCUT Laser Cutting Technique</strong></td>
<td>217</td>
</tr>
<tr>
<td>Sigurd Villumsen, Steffen Nordahl Joergensen and Morten Kristiansen</td>
<td></td>
</tr>
<tr>
<td><strong>Food Customization: An Analysis of Product Configurators in the Food Industry</strong></td>
<td>229</td>
</tr>
<tr>
<td>Monika Kolb, Paul Blazek and Clarissa Streichsbier</td>
<td></td>
</tr>
</tbody>
</table>
Generative Design Approach for Modelling of Large Design Spaces ................................. 241
Bastian Sauthoff and Roland Lachmayer

How to Squeeze a Configurator into a Handheld Device ............. 253
Homero M. Schneider, Marcos F. Espindola and Yuzo Iano

Implementation of BIM in the Danish Building Sector ............. 265
Lene Faber Ussing and Jesper Kranker Larsen

InnoTracing: A Framework to Investigate the Moment-to-Moment Unfolding of Leadership, Creativity, and Innovation. ............. 275
Ian Sutherland, Paul Blazek, Birgit Penzenstadler, Hans Lundberg and Hagen Habicht

Introducing Mass Customization to SMEs in Furniture Industry: A Case Study ........................................ 287
Nikola Suzić, Zoran Anišić and Cipriano Forza

Is Sustainable Mass Customization an Oxymoron? An Empirical Study to Analyze the Environmental Impacts of a MC Business Model .................................................. 301
Golboo Pourabdollahian, Marco Taisch and Frank T. Piller

Living Lab Methodology as an Assessment Tool for Mass Customization ........................................ 311
Lynn Coorevits, Constantijn Seys and Dimitri Schuurman

Managing Process Customisation for the Capital Goods Sector: An Application Case Study .......................... 321
Juan Manuel Besga, Juan Carlos Astiazaran and Patxi Zubizarreta

Mass Customization and Performance Assessment: Overview and Research Directions .......................... 333
Simon Haahr Storbjerg, Thomas D. Brunoe and Kjeld Nielsen

Mass Customization as Innovation Driver of International Competitiveness in Peripheral Regional SME Subcontractors ......... 349
Stig B. Taps, Thomas D. Brunoe, Kjeld Nielsen and Kaj A. Joergensen

Mass Customization Measurements Metrics .......................... 359
Kjeld Nielsen, Thomas D. Brunoe, Kaj A. Joergensen and Stig B. Taps
Miriam Oversohl and Moritz Wellige

Mechatronic Behavior Analysis of a Customized Manufacturing Cell ................................................................. 389
Paryanto, Matthias Brossog, Jochen Merhof and Jörg Franke

Modelling and Organising Customer-Driven Business Processes in a Mass Customisation Environment ......................... 401
Hans-Henrik Hvolby, Chris Martin and Heidi Dreyer

Multidisciplinary Product Decomposition and Analysis Based on Design Structure Matrix Modeling .......................... 409
Tufail Habib

Thierry Rayna, Ludmila Striukova and John Darlington

Open Innovation: Creating Value Through Co-Creation ......................... 437
Yaghoub Zahedi Anbardan and Maryam Raeyat

Product, Organizational, and Performance Effects of Product Modularity ............................................................ 449
Henrike E. E. Boer

Production and Resource Scheduling in Mass Customization with Dependent Setup Consideration .......................... 461
Izabela Nielsen, Grzegorz Bocewicz and Ngoc Anh Dung Do

Scaling Up Local and Individualized Solutions, Challenging Existing Logic ............................................................ 473
Nicola Morelli

Strategic Capabilities to Manage High-Variety Production Environments: The Role of Underlying Activities and Organizational Resources ........................................... 487
Frank Steiner and Moritz Wellige

The Impact of Mass Customization on the Artist’s Paradigm in the Twenty-First Century ........................................... 505
Donald M. Rattner
The Impact of the Arrangement of User Interface Elements on Customer Satisfaction in the Configuration Process .......................... 517
Paul Blazek and Klaus Pilsl

The Use of Modelling Methods for Product Configuration in Industrial Applications .................................................. 529
Lars Hvam, Martin Bonev, Anders Haug and Niels Henrik Mortensen

Understanding Complex Construction Systems Through Modularity ................................................................. 541
Tor Clarke Jensen, Baris Bekdik and Christian Thuesen

Editor’s Biography ................................................................. 557

Author Index ................................................................. 559